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**Title**: FACTORS INFLUENCING THE OCCURRENCE OF CETACEANS IN THE MINCH, SCOTLAND, SUMMER 2002.

Category: Ecology

**Student**: Not Applicable

**Preferred Format**: Poster Presentation

**Abstract**: This study investigated the distribution and occurrence of cetaceans in the waters of the northern Minch, off northwest Scotland. The aim was to determine spatial and temporal variations and investigate the possible relationships with a number of variables. Surveys were conducted from the passenger ferry M/V Isle of Lewis during the summer months. Data were collected on cetaceans sighted and on the level of effort conducted. A total of 97 sightings of six species, comprising 154 animals were recorded throughout the duration of the study. The most commonly sighted species were the harbour porpoise (Phocoena phocoena) and the minke whale (Balaenoptera acutorostrata). Relative abundance of other species, such as white-beaked dolphins (Lagenorhynchus albirostris), was low. Cetaceans were sighted throughout the study area, although harbour porpoises were concentrated in the near shore areas and minke whales in the western half of the Minch. The presence and distribution of cetaceans were related to month and water depth, with most sightings occurring in deeper waters during the final month of the study. This may relate to the distribution of prey. Cetacean numbers were also related to the lunar and tidal cycles. The majority of sightings occurring 16-29.5 day after the full moon for both harbour porpoises and minke whales. The number of harbour porpoises was greatest around high and low tide and minke whale numbers greatest during the flood tide. These relationships may be associated with the behaviour, distribution and abundance of prey.